

Name _____

Date _____

Permeability, Porosity, Capillarity

Mrs. Brighton
Earth Science

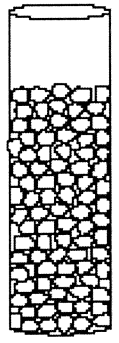
Permeability:



Mixed particles
(0.00001 cm to
0.5 cm in size)

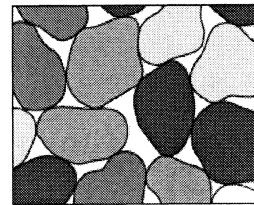
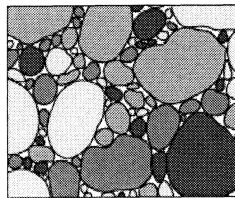


Dry mud
(Smaller than
0.0004 cm in size)

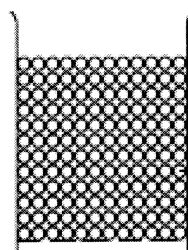


Uniform-sized
particles
(0.2 cm)

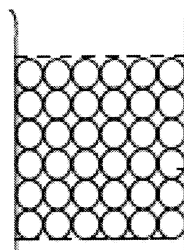
Porosity:



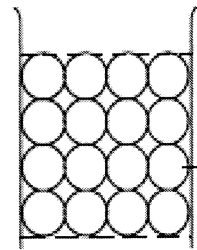
Capillarity:



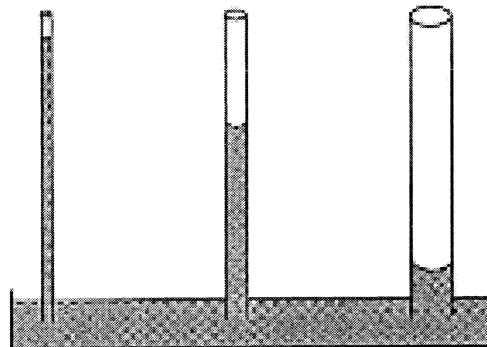
0.10-cm
diameter



0.40-cm
diameter

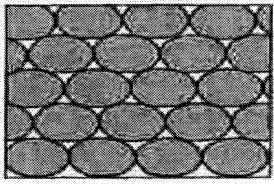


0.70-cm
diameter

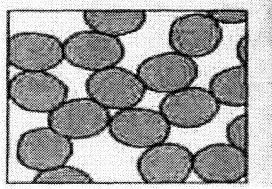


Closure Questions

1. Which soil will have a greater porosity? Why?

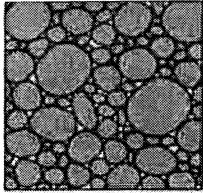


C

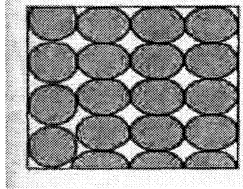


D

2. Which soil will have a greater porosity? Why?



E



F

3. As slope increases, infiltration _____ ?

4. As slope increases, runoff _____ ?

5. By what process does water move UPWARD through soil? _____

6. What size particles show this process best? _____

7. For soil to have HIGH PERMEABILITY it must be:
_____ size, _____ shape, _____ sorted, _____ packed.

8. Which type of soil has the HIGHEST PERMEABILITY?) clay, silt, sand, pebbles? _____

9. For soil to have HIGH POROSITY it must be:
_____ size, _____ shape, _____ sorted, _____ packed.

10. Which type of soil has the HIGHEST POROSITY?) clay, silt, sand, pebbles? _____

11. For soil to have HIGH CAPILLARITY it must be: _____ size.

12. Which type of soil has the HIGHEST CAPILLARITY?) clay, silt, sand, pebbles? _____

13. Precipitation will INFILTRATE MOST when soil is: _____

14. Precipitation will INFILTRATE MOST when soil is: _____